

**Claims:**

1. Method for the identification of a sentinel lymph node in a subject comprising
  - 5 a) administering to said subject a preparation comprising microbubbles comprising a shell and a gas or gas precursor, said microbubbles having a mean particle size of about 0.25 – 15  $\mu\text{m}$  in diameter and a pressure stability of at least 50% at a pressure of 120 mm Hg,
  - b) allowing said microbubbles to accumulate in said sentinel lymph node and
  - 10 c) detecting said microbubbles in said sentinel lymph node using ultrasound.
2. Method according to claim 1 wherein the preparation is interstitially, preferably percutaneously, administered.
- 15 3. Method according to claim 1 and 2, wherein the shell has an overall negative or positive net charge, preferably an overall negative net charge.
4. Method according to claims 1 to 3 wherein the shell comprises lipids, preferably phospholipids.
- 20 5. Method according to claims 1 to 4 wherein the shell comprises negatively charged phospholipids in an amount of from 50% to 100%.
6. Method according to claims 1 to 5 wherein the microbubbles are stable for
  - 25 pressure variations associated with ultrasound imaging of a mechanical index of at least 0.2.
7. Method according to claims 1 to 6 wherein the preparation further comprises a macrophage stimulating compound.
- 30 8. Microbubbles for the identification of a sentinel lymph node comprising a shell and a gas or gas precursor and having a mean particle size of about 0.25 – 15  $\mu\text{m}$  in diameter wherein said microbubbles have a pressure stability of at least 50% at a pressure of 120 mm Hg.

9. Microbubbles according to claim 8, wherein the shell has an overall negative net charge.

5 10. Microbubbles according to claim 8 and 9, wherein the shell comprises lipids, preferably phospholipids.

11. Microbubbles according to claims 8 to 10, wherein the shell comprises negatively charged phospholipids in an amount of from 50% to 100%.

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12. Preparations for the identification of a sentinel lymph node comprising microbubbles according claims 8 to 11.

13. Preparations according to claim 12 further comprising a macrophage stimulating  
15 compound.

14. Use of microbubbles according to claims 8 to 11 for the manufacture of a preparation for the identification of a sentinel lymph node.

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